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Children as researchers in English primary schools: developing a model for good practice

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Abstract

Since the establishment of the Children's Research Centre at The Open University (CRC) in 2004, children from the age of nine have been shown to be able to engage meaningfully with research process when given appropriate training. This paper reports on the findings of a four-year doctoral study (Bucknall, 2009) which identifies and explores the issues and barriers that influence experiences of children's engagement in self-directed empirical research in these settings. Multiple-case study was adopted as the research strategy for this study. A flexible, multi-method research design was applied. Predominantly qualitative data were generated with adult and child participants in five schools associated with the CRC and data analysis was informed by grounded theory. The central categories which emerged from the data and, in particular, the identification of important issues by the children, have together informed the staged construction of a model for CaR initiatives in English primary schools. This illustrates the factors and processes that had an impact on both the children's experiences of research training and the research process and outcomes and demonstrates that these are inextricably interrelated. This study addresses a gap in our knowledge and understanding of children as researchers and consideration of the issues and barriers identified will provide a basis for good practice during the further implementation and evaluation of young researcher initiatives in schools.

1. Background to the study

Prior to the establishment of the Children's Research Centre at The Open University (CRC) in 2004, pilot studies with two cohorts of children in English primary schools demonstrated that children from the age of nine are able to engage meaningfully with research process when given appropriate training (Kellett, 2003, 2005b). The movement towards children as 'active' researchers (Kellett, 2005a) has been influenced by the perceived lack of children's own voices in research about their lives and as a response to the inevitable power inequalities which are present in adult-child research. Children have frequently been the passive objects or subjects of adult-led research. Many have adopted less passive roles as participants or even as co-researchers, the latter role often prompting adults to refer to their young co-workers as 'children as researchers'. Clark *et al* (2001), for example, discuss engaging young people as researchers but account for the 'research team' only in terms of its adult members while Bland and Atweh describe 'students as researchers' to be 'full participants as co-researchers' (2007:340). Furthermore, Atweh and Burton perceive students as researchers as a 'method of research', a 'technique' to be employed (1995:562). These examples exemplify the imbalances of power that can exist between adults and children in collaborative research. Although Alderson (2000) also uses the term 'active researchers', it is clear from her accounts of research that this sometimes indicates only that children have been active at some point during the research process, as co-researchers (see also Coad and Lewis, 2004; Jones, 2004).

In marked contrast to these different understandings of 'children as researchers', Kellett (2005a) intends this designation to apply to children who direct their own research from inception to dissemination, generating original knowledge relating to issues which they themselves identify as significant to their lives. The view that children do not have the competencies needed to engage in research process is an area of debate (Christensen and Prout, 2002; Morrow, 2005). However, competence in this context is not age-related but is reliant on the acquisition of skills and knowledge which adults, by judging sensitively children's training and support, can 'scaffold' for children (Bucknall, 2005, 2009; Kellett, 2005a, 2005b, 2010).

In the six years since its inauguration, a growing number of schools and other organisations have commissioned the CRC to deliver training to develop children's research skills and support their research projects. (Examples of research topics chosen by primary school children and a summary of the research training the children receive can be found in Appendices A and B). Systematic evaluation of the strengths and weaknesses of the programme, however, had not been carried out. Furthermore, substantial claims have been made by adults regarding process and outcome in relation to the movement towards enabling children to actively engage in research process. These claims are grounded in current debate surrounding the issue of children's status in our society and in school, children's 'voice' and participation and the effects of power in children's everyday lives and in research relationships. As such, these are adult views of what is significant or potentially problematic. They have been largely unsupported by the views of children themselves: until the doctoral study reported here, there had been little research directed at understanding how children have experienced taking part in these programmes.

My personal involvement with the CRC began when I was a primary school teacher and took on the role of an adult CRC facilitator, leading ultimately to a Masters dissertation (Bucknall, 2005). Through this earlier exploration of primary-school children's perceptions of the outcomes of their engagement in self-directed active research, and through my personal experiences as a facilitator, I had become aware that initiatives in English primary schools that set out to support children's empowerment through enabling them to become researchers raised complex issues that went beyond power differentials between adults and children. I found myself convinced by the argument that children's participation in the decision making processes of their schools and communities could be informed through their engagement in young researcher initiatives. It was clear to me, however, that there were other issues and barriers, not least the context of the children's training and research, which were likely to influence their experiences and affect outcomes.

Given the paucity of any evidence-based literature relating to significant and problematic issues concerning children as researchers (CaRs) in English primary schools, if children are to be recognised as social actors in their own right (Qvortrup, 1994; James *et al*, 1998), and given a voice by offering opportunities to carry out their own research projects, then it is vital that their perspectives on process, outcomes and barriers are explored in addition to those of their teachers. After all, the intention of the CRC programme is not only to develop young researchers' skills, but to give them a voice. In keeping with the philosophy of the CRC, therefore, the research presented here sought to listen to children's opinions on young researcher initiatives with a view to learning more about their perceptions of the value and relevance of CRC programmes and learning more about possible barriers to their participation and engagement. The construction of a comprehensive account of the

factors which influence these experiences, and the concomitant construction of a model for good practice (Bucknall, 2009), is likely to have implications for future young researcher initiatives in primary schools, providing a basis for further implementation and evaluation.

2. Context for the study

The study is set in the context of increased emphasis on children's rights and, as outlined above, children's increased involvement in research. These factors have had two principal drivers. The first has been the shift towards acknowledging children as social actors in their own right. The second has been the United Nations Convention on the Rights of the Child (UNCRC)(UN, 1989), ratified by the UK Government in 1991. This states that children's best interests are to be a primary consideration for policy and decision makers and that the evolving capacity of children must be factored into law and policy. Articles 12 and 13 of the UNCRC, by requiring that children's views must be sought and given due weight in all matters affecting them, paved the way for them to voice their opinions on activities and decisions which shape their lives and means that traditional notions of childhood and children's status are no longer tenable. Despite the Government's ratification of the Convention, however, it has yet to incorporate it directly into UK law.

Instead, UK Government policy initiatives emphasise children's dependency on their parents and idealise childhood as a time of innocence (Such and Walker, 2005). Yet, as the literature attests, children frequently take on responsibilities in caring or volunteering roles, both within the family and in their communities, highlighting how adults might come to be dependent on children (see, for example, Stalford, 2000; Lister, 2006; Tarapdar, 2007). Similarly, research refutes the notion of children's innocence and demonstrates that not only are children of primary school age aware of community, national and global issues, including racism, violence, poverty, terrorism and substance abuse but also that they would like to be more involved in helping to solve problems and to be better informed (Holden, 2006; Taylor *et al*, 2008). The research topics chosen by some young researchers support this position (see, for example, Watson, 2004; O'Brian, 2005; Okpara and Niran, 2007).

It is important to remember, however, that children's rights to participate, to express opinions and to be heard are mediated through adults (Wyness, 2006). Nevertheless, in the literature there are many calls for adults to re-think their perceptions of adult-child relationships as hierarchical (for example, Roche, 1999; Willow *et al*, 2004). It is not, as Wyness *et al* (2004) explain, that children are not competent but that they have not been given the opportunity to express their opinions on social and political issues. Wyness and his colleagues go on to suggest that spaces that would allow children to acquire these citizenship skills are more likely to succeed at a local level. Schools, therefore, would seem to provide ideal spaces in which children might acquire these skills. Yet, the rights discourse in the context of education focuses primarily on children's collective rights to education rather than on children's experiences within the system itself, where children are positioned as subordinate to adults who control their time, space and interaction (Mayall, 2000; Prout, 2001; Devine, 2002). Prout (2001) suggests that policy initiatives in schools (and elsewhere) would be more effective if children's active role in producing 'local realities' was acknowledged. Children need to be viewed as occupying a position within a net-like system of relationships rather than being seen to occupy a lowly position in a more traditional hierarchical model of associations

(Prout, 2001). This challenge further intensifies the call to discard the view of children as 'passive receptors' of educational processes (James and James, 2004:117).

Despite the rapid growth of participatory activity in the UK (Thomas, 2007), confusion about what participation means remains evident. Tisdall and Davis, for example, conclude that 'participation work with children and young people is presently facing hard questions about its translation from principle to effective practice' (2004:132). This has been shown to present particular difficulties in schools which cannot yet claim to provide democratic environments for the expression of pupil voice despite the introduction of purportedly democratic initiatives such as school councils. As Lansdown has pointed out, Article 12 'introduces a radical and profound challenge to traditional attitudes' (2001:2).

Nevertheless, Articles 12 and 13 of the UNCRC are seen to create a 'discursive space' for children in which their voices can be heard (Kellett *et al*, 2004a:35) and initiatives that facilitate children's independent and active research can be seen as contributing to the growing number of voice and participation initiatives. Kellett proposes research initiated and carried out by 'children as active researchers' (2005a:2) as a means of improving adult understandings of children and childhood. This, she argues will not only 'unlock' child voice (2005a:2) but also 'promote children's democratic involvement at all stages of decision making' (2010:8). Interpretations of children's 'voices', however, continue to be problematic. From some viewpoints at least, although the status of the child has changed, current understandings of what 'voice' entails, the reasons it might be sought and the contexts in which children and young people might be able to express their views all influence whether or not their voices are heard and listened to in meaningful ways. Compliance and obligation, for instance, are seen by Rudduck and Fielding (2006) to be responsible for the increase in popularity of student voice projects. The rapidity with which initiatives have been put into place as a result is a point of concern. Rudduck describes how the proliferation of related advice and publications manifests 'mile-wide promotion with only inch-thick understanding' (2006:133). It has been seen that when children's voices are invoked only as a nod towards Article 12, then children are not likely to be taken seriously as competent social actors and sustainable changes in the ways organizations such as schools structure themselves are unlikely to be made.

From the review of the literature underpinning the doctoral study, it became evident that the introduction of participative and pupil voice initiatives can be especially problematic in school contexts and that adult-child relationships appear to be a significant factor. The earlier study (Bucknall, 2005) supported both these findings, with young researchers, in particular, identifying relationships as key in relation to their experience of research process. Furthermore, adult perceptions of the outcomes associated with participative initiatives as accounted for in the literature do not always concur with those identified by the young researchers in the earlier study. It was crucial, therefore, that difficulties which CaR initiatives might encounter be investigated in more depth.

3. Research methods

Multiple-case study was adopted as the research strategy for this study and sampling was both opportunistic and purposive. Although steadily increasing in number, only a few primary schools

across the country had children's research groups or clubs supported by the CRC programme during the period of data generation. For pragmatic reasons, five English primary schools (Archway, Bridge, Pagoda, Rotunda and Tower) were chosen where some contact had already been established. The schools covered a wide geographic spread and, in each setting, engagement with the programme was initiated and facilitated in different ways (see Table 1). Each school is co-educational and state funded. To protect school and personal identities, names have been changed.

Data generation followed a flexible approach. This was sufficiently open-ended, reflexive and responsive to allow the exploration of both children's and adult' subjective experiences of their involvement in research groups within each of the school settings. A multi-method research design was applied and predominantly qualitative data were generated. It was planned for data generation to focus on the children who were members of the research groups, their peers, their class teachers, members of the school's senior management teams and the adults who facilitated the training in each school and supported the children during their research (whether internal or external to the school). However, due to staff absences, the period within which data could be collected and other school activities (both planned and unforeseen), it was not possible to involve all these informants in each case.

School	Instigated by	Research group	Facilitator(s)	Allocated time
Archway (Year 1)	School 'G&T' * manager	Year 6 G&T* pupils (n=6) Selected by teachers	CRC adult	During curriculum time
Archway (Year 2)	School 'G&T'* manager	Year 6 'G&T'* pupils (n=6) Selected by teachers	Member of school teaching staff	During curriculum time
Bridge	External funding body	Year 6 pupils Self-selected (n=6)	CRC adult	After-school club
Pagoda	External funding body	Year 5 pupils Selected by teachers (n=6)	CRC adult and adult members of external agency	During curriculum time
Rotunda	Class teacher	Whole Year 6 class (n=26)	Class teacher	During curriculum time
Tower (Year 1)	School governor	Year 5 pupils (n=6)	School governor (trained by CRC)	During curriculum time
<i>Tower (Year 2 -not completed due to unexpected events)</i>	<i>Class teacher</i>	<i>Whole Year 6 class (n=25)</i>	<i>Class teacher</i>	<i>During curriculum time</i>

*'Gifted and Talented': UK Government adopted designation for more able children in schools

Table 1: The initial set-up of the research groups in the five case study schools

The various data generation methods adopted within the multiple-case study framework are summarised as:

- focus groups with young researchers in all five settings (n=33)
- focus groups with peers of the young researchers in three settings where the initiative had not directly involved their whole class and in one where, during the first year of the initiative, only a small group of children had been directly involved (n=24)

- one-to-one unstructured interviews with participating adults in all five settings (n=14)
- questionnaires from peers of the young researchers in the three settings where the initiative had not directly involved whole classes (n=139)
- questionnaires from young researchers in two settings where it was not possible to facilitate focus groups with all the children directly involved (n=21)
- non-participant researcher observations and diary reflections.

Focus groups held with groups of young researchers and their peers were designed to include planned participatory activities when this was possible. Two young researchers who did not complete their research took part in an unstructured paired interview.

By providing insights into the participants' experiences of CaR initiatives in schools, each case study was instrumental in allowing contextual conditions and their impact to be explored. The strategy adopted also allowed conceptual categories to be developed inductively. This was felt to be necessary since, although case study researchers often rely heavily on description and narrative for their reporting (Cohen *et al*, 2000), conceptual categories allowed cross-case comparisons to be made and the relationships between issues made more explicit. Alongside descriptive elements, this seemed of vital importance if the research findings were to contribute meaningfully to the development of CaR initiatives more widely. It was crucial that the emic issues emerging from the data informed these conceptual categories, rather than the etic issues arising from the literature review. Geertz identified the focus on emic issues, such as that adopted here, i.e., the perceptions of the actors involved in a setting, as 'thick description' (cited in Stake, 1995:42).

The analysis of qualitative data generated through these methods was carried out 'in the style of' grounded theory, working on full transcripts. The analysis of a smaller amount of quantitative data both complemented and informed the qualitative analyses: the data were not seen to be separate but interrelated.

4. Research findings: constructing a model for good practice

The analytic process yielded a considerable number of conceptual data categories which were incorporated into seven central themes. These and, in particular, the identification of important issues by the children, have together informed the staged construction of a model for CaR initiatives in English primary schools. Preliminary and intermediate models, constructed after analyses of the participatory activity and questionnaire data respectively, were modified and augmented after analysis of the interview and focus group discussion data, to take into account issues emerging from the data which were newly identified or corroborated by the children as significant. The final model, shown in Figure 1, thus takes into account the findings of the study which emerged from the data in its entirety. It illustrates the factors and processes that had an impact both on the children's experiences of research training and on the research process and outcomes, and demonstrates that these are inextricably interrelated.

The seven central themes are presented as shaded circles in the model. These are: *participation*, *voice*, *ownership*, *resources*, *outcomes*, *set-up* and *power*. The last of these is placed centrally since

the findings suggest that the influence of power is pervasive. The arrangement of the six remaining themes in a circle creates six sectors. The factors and processes which the children have identified as being a significant part of their experiences are displayed within these sectors where appropriate. *Dialogue* and *communication* are placed centrally since the findings suggest that these are heavily influenced by the exercise of power and are key factors in the children's and adults' experiences of CaR initiatives. *Motivation*, *purpose* and *time* are displayed in more than one sector of the model since they are implicated in more than one set of relationships between the central themes. Significantly, the findings suggest that, in this study, *voice* has most often been invoked through the children having (or not having) the opportunity for *choice*. The model has been modified to show this.

Relationships between the central themes are shown by arrows indicating two-way relationships, tentative relationships suggested by the analysis of the earlier sets of data having been confirmed. This arrangement thus makes explicit not only the relationships between the central themes but also those between these themes and the factors and processes identified. An outer circle has been added to show how the factors, processes and relationships could be placed ostensibly into three categories, namely *rights based issues*, *operational issues* and *skills based issues*.

It should be noted, however, that these three categories have been imposed by the researcher rather than being identified by the participants. It is especially significant, for example, that although there are issues which are clearly rights based, the children in this study did not appear to perceive them to be so. Furthermore, although the final amendments and augmentations to the model have been made as a result of the analysis of a large amount of interview data, elements identified *only* through the analysis of this set of data (shown in grey) will need to be substantiated through further research. The model, therefore, is not currently as robust as it needs to be. Nevertheless, not only does the model provide a good basis for the further study of CaR initiatives which will, hopefully, strengthen its validity, consideration of the issues and barriers identified will also provide a basis for good practice during the further implementation and evaluation of young researcher initiatives in schools.

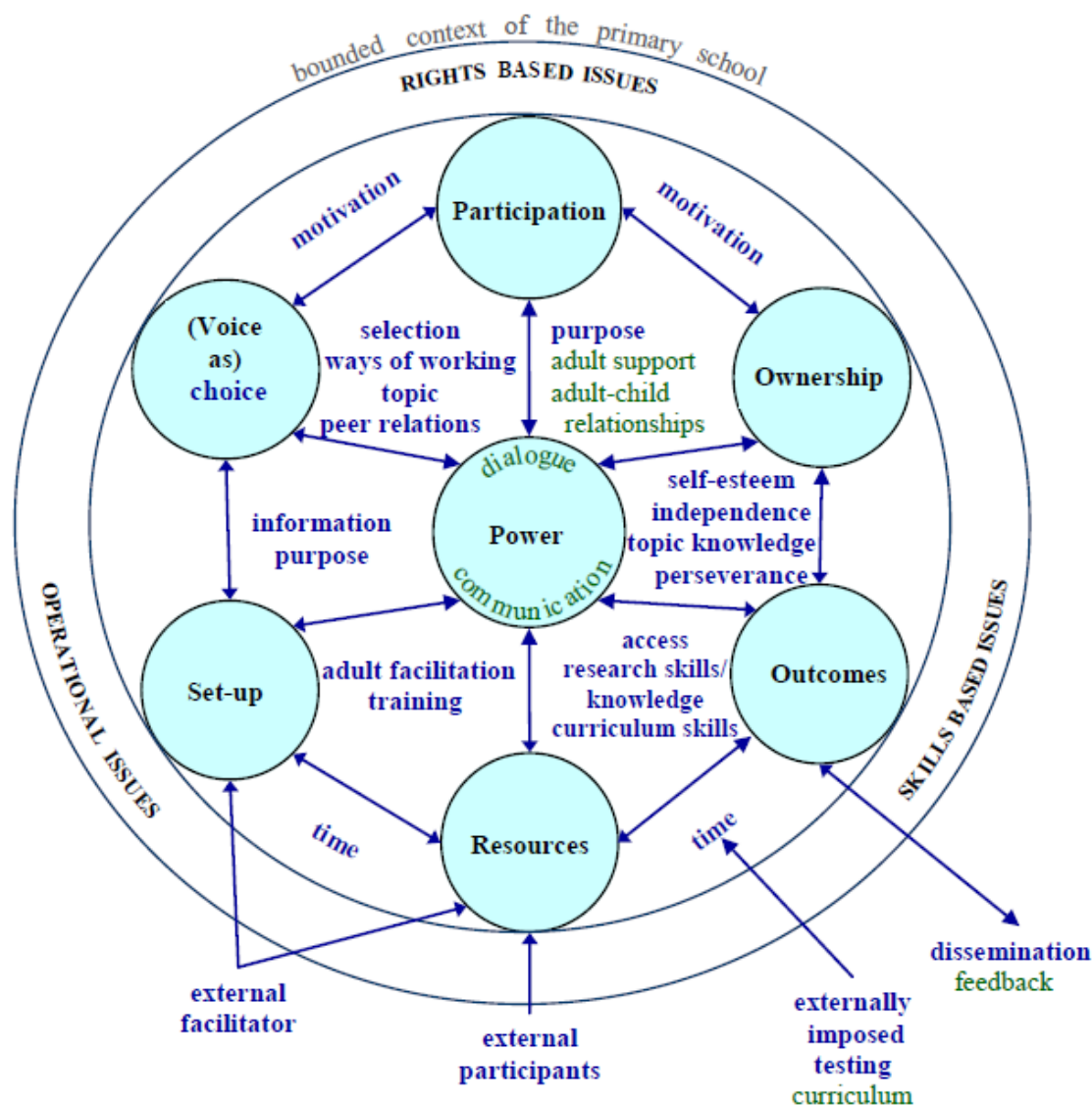


Figure 1: A final model emerging from the data: factors and processes which impact on children as researchers in English primary schools

Examining the model: an illustration

Due to the length and complexity of the study and lack of space, it is not possible to examine all the findings here. Instead, the implications of parts of the section of the model shown in Figure 2 will be discussed briefly. They pertain to the primary research question the study sought to address, i.e. , *What aspects of English primary school environments create barriers to children's active engagement in research process?* For a full discussion of this and other sections of the model, see Bucknall (2009).

Interrogation of the data suggests that the identification of barriers to children's active engagement (commitment to and sustained interest) in research process includes some which might be described more accurately as barriers to children's participation (inclusion) in CaR initiatives, although these

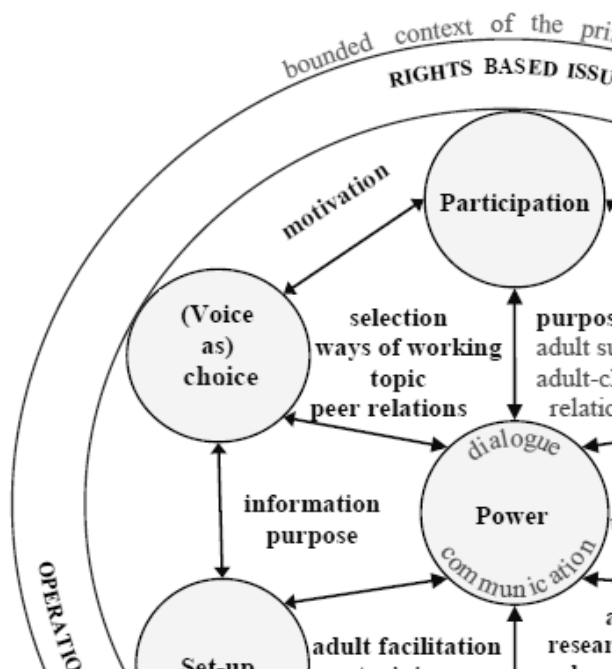


Figure 2 A section of the final model emerging from the data focusing on *voice as choice*

are clearly interrelated. Barriers to children's participation, for example, include the ways in which the young researchers are selected (where only a small group of children belong to the research group) and inadequate information, whereas barriers to children's engagement highlight the importance of the children being allowed to make choices about their research topics and how they work. In this study, the notion of voice was thus brought into play through opportunities (or lack of opportunities) to make choices about belonging to the research groups, about topics and about ways of working. These expressions of voice seemed particularly significant for the children.

Focussing on one example of the issues identified by participants, it is notable that all those young researchers interviewed were unanimous in confirming choice of topic as a crucial motivational factor. As one young researcher at Bridge explained, *if we are researching something that we want to know about, we are more enthusiastic and more likely to take it seriously and if we are not then it's just, like, what's the point?* The motivating effect of freedom of choice of research topic was also acknowledged by most of the teachers and facilitators involved. However, detailed examination of the data revealed that whether or not the children's choices were respected was very much dependent on the perceived purpose of the CaR initiatives.

In most schools in this study, where the purpose was clearly understood as the empowerment of pupils in terms of pupil voice, no restrictions were placed on topics. At Bridge, Pagoda, Rotunda and Tower, the children's choices were valued no matter what they were. At Archway, however, where the CaR initiative was seen as provision for the more able, two young researchers dropped out of their school's research group partly because they were not allowed to pursue the topic of their choice. Not only did this action on the part of the school cause these children to lose motivation, it also revealed a mismatch between teachers' and children's views. The school did not consider the

topic sufficiently weighty in academic terms. Since the topic was something that was important to the children, however, they felt that this embargo was disrespectful as it signalled to them that their research questions were regarded as trivial. Restricting children's choice in this way not only acts as a barrier to their engagement in the research process but also sends a clear message that the school is not really interested in listening to what children have to say about issues that are of real concern to them.

At the same school, one child's choice of bullying as a research topic was reported by his teacher as unacceptable to the school since it might have caused the child's potential participants to worry about something the school felt was not a problem. The same teacher talked of *research people won't like*, explaining that, *sometimes the children's agenda is different to [the headteacher's] agenda and by [the headteacher's] agenda I mean the school's agenda*. Yet, as a result of the external facilitator's mediation on the child's behalf, the bullying topic was pursued and the child's research findings led to a change in the school's bullying policy. As Prout (2001) suggests, policy initiatives in schools would be more effective if children's active role in producing 'local realities' was acknowledged. While it should be noted that denying a child's right to pursue a topic of concern to them could be interpreted as a contravention of Article 12 of the UNCRC, it is perhaps more helpful to consider the positive role that dialogue can play in addressing conflicts between adults' and children's priorities. In the case discussed above, the facilitator was able to negotiate with the school on the child's behalf. Such dialogue, suggests Hill (2005), would help to ensure that it is children's needs which are addressed and not those attributed to them by adults. This suggests that schools need to pay close attention to their reasons for wishing to engage with CaR initiatives and to understand that these might be in conflict with those of the children.

Findings from this study support the argument that when children identify and research significant issues which blur the boundary between their lives inside and outside school (what one young researcher at Archway referred to as *my own important stuff*) this can lead to increased understanding of children's experiences within school (Rudduck and Flutter, 2004). The teacher at Rotunda, where the whole class had chosen their own research topics, attested to the impact this had had not only on the children's understandings of their life experiences but also on her understanding of the children in her class and on people in the local community. The findings from this study lend support to Hartas' proposition that 'research as a bottom-up activity has the potential to be transformative because it originates within young people's micro settings' (2008:167).

Where there were misgivings about the children's choices, it was only through discussion that adults came to realise why it was important for children to pursue their own agendas. This supports Hill's (2005) suggestion that dialogue is key, but it should be noted that the findings from this study have shown that this dialogue can only come about when adults are willing to enter into these discussions and to listen to what the children have to say. At Rotunda, where the young researchers chose to investigate sensitive topics (racism, murder and unhappy childhood experiences, for example), this prompted ethics-related talk and further discussions within the class that opened up hitherto *taboo* subjects and raised awareness within the class of others' different lives and concerns. At this school, the children's choices of 'difficult' topics countered adults' perceptions of children's innocence and allowed adults and children to engage in the kind of genuine dialogue about issues which are

important to children that is felt to be so important in developing children's socially aware citizenship (Howe and Covell, 2005).

In addition to offering opportunities to engage in genuine, intergenerational dialogue about important topics, as discussed above, this study established that being able to choose a research topic had significant motivational value as far as the children were concerned. This was because it permitted them to pursue topics that did not usually feature in the school curriculum and allowed them to be the 'experts'. This was nicely illustrated by the young researcher at Pagoda who contrasted finding out *things that the teachers already knew [that] they wanted you to find out as well* with being able to *tell the teachers what we have found out because they might not know that already 'cause we found it out and we are telling them and it feels different*. Adults also reported that they welcomed this as it was a cause of some regret for several teachers across the schools that the *very prescribed* nature of the curriculum limited the range of topics they were able to cover in the classroom. This was a particular problem when children were preparing for the SATs in Year 6. A teacher at Tower explained, *we are pushing, pushing, you know, "You've got to learn this, you have to do this, you have to revise that."*

Although the majority of young researchers in this study identified choice of topic as crucial, it should be noted that some children reported that they found freedom of choice a difficult path to negotiate. As this problem was also mentioned by teachers at Rotunda and Tower, where, respectively, initiatives had been completed or were beginning with whole classes, it suggests that this factor needs to be taken into account when children with a wide range of abilities participate in CaR initiatives. It is clear that when adult facilitators work with children who find such choices difficult to make, they need to take care to carefully scaffold the process of identifying a research topic and then a specific research question so that the young researchers retain ownership of their project. As the findings of this study suggest, unless this happens, freedom of choice can itself become a barrier to children's engagement in research process.

Conclusion

Other models for children's voice and participation have been proposed previously (see, for example, Hart (1992), Shier (2001) and Fielding (2001). None of these, however, are specific to CaR initiatives. More significantly, there is no evidence that children's identification of significant elements, drawn from their own experiences, have been a consideration in their construction. (See Bucknall (2009) for a direct comparison between the CaR model proposed here and the models referred to above.)

As far as is known, therefore, representing children's perspectives in this way has not previously been attempted. Thus, it could be argued that existing models present a somewhat partial account of the relationships between the various factors that can facilitate or inhibit children's participation in 'voice' initiatives. Also, although the research described here does not draw on a particularly large sample of cases, there is considerable consistency in the children's views across all cases suggesting that the findings offer an advance in our knowledge and understanding of possible barriers to children's participation in young researcher initiatives in English primary schools. The original model and training programme developed by Kellett (2003) for children as active researchers was informed

by the pilot studies situated within the context of the primary school (Kellett, 2003, 2005b). As these studies did not attempt to account for the potential barriers to children's engagement in research process in a systematic way, the findings from the current study will contribute to refinement and clarification of Kellett's original model.

The new CaR model presented here is necessarily predicated on the findings of a single study. Nevertheless, rather than being seen as a conclusion and end point, it should be viewed as a starting point. It is expected that this new model will need modification as a result of further research, evaluation and reflection. Nevertheless, it is clear that if conditions are unfavourable, CaR initiatives which set out to empower children can, instead, leave children feeling excluded, disempowered and disengaged. It is important, therefore, that the initiatives are implemented and supported in ways which will support their success. Consideration of the issues and barriers identified will provide a basis for good practice during the further implementation and evaluation of young researcher initiatives in schools.

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Appendix A

Examples of topics chosen by primary school children for their research projects:

- Possible links between extra-curricular music and future aspirations
- Children's worries
- The impact of subject enjoyment on subject achievement
- Getting around as the child of a wheelchair user
- What children think about first-aid training
- What children and adults think about community police
- Children's experiences of having a thyroid disorder
- Children and bereavement
- What children think about after-school clubs
- Whether playing a musical instrument affects how good you are at maths
- The social aspects of home-schooling
- The environments children prefer for doing their homework in
- Children's views about school hours
- Exploring what people think about water use
- What children think about scouting and guiding
- Gender differences in pupils' use of computers
- Investigating the views of pupils about mixed gender football
- How children are affected by the nature of their parents' jobs
- Social interaction between children and lunchtime supervisors
- What children think about their local parks
- The social nature of television viewing in children
- What children think about their local housing estates
- Children's views on payment for different jobs
- Safety at bus stops from children's points of view
- The public's opinion about nuclear power and wind power
- The public's opinion on cloning
- Year 6 children's emotions towards KS2 statutory tests (SATs)
- What children think about television and literacy
- How confidence affects literacy
- What families think about global warning

Research reports written by the children who chose these topics, together with those written by many others, can be found on the CRC website at:

<http://childrens-research-centre.open.ac.uk>

(It should be noted that, at the time of writing, considerably revision and updating of the website is planned.)

Appendix B

A summary of the CRC training programme

The children's research training programme has two main components. These comprise a series of sessions that offer training in research methods together with dedicated support to help children develop and carry out a research project of their own. The teaching and learning model used by CRC trainers involves active learning, debate and discussion between children, who:

- consider what research is
 - engage critically with other people's research
 - consider research ethics
 - learn about different methods for generating (qualitative and quantitative) data
 - learn about (quantitative and qualitative) data analysis
- and
- develop report writing and presentation skills.

Delivery of the training element of the programme is flexible and is tailored to meet the needs and circumstances of individual schools that choose to participate. For example, at one school in the study, the training was delivered during ten weekly sessions of one hour before the children were supported in carrying out their own projects. In contrast, at another, the training element was delivered during three whole-day sessions by CRC facilitators with the children being supported in working on their own projects between and after training sessions. As a final example, at another school, where a whole-class model was adopted, it was delivered by the class teacher during curriculum time in sessions of varying length over more than one school term before the children began their own research.

Thus, following, or in tandem with the training programme, the children are supported in:

- identifying a narrowly focused research topic
 - engaging critically with others' research and findings relevant to their chosen topic
 - applying research ethics
 - designing a research project
 - designing qualitative and quantitative research instruments for gathering their data
 - engaging in quantitative and/or qualitative data analysis
 - interpreting their findings
 - discussing their findings in relation to those of others'
- and
- reporting and presenting their research.

Crucially, while the children are conducting their own research projects, the adult role is one of support and facilitation, not management.

As a general rule, programmes in primary schools run during a single school year, from October to May.

Further details can be found on the CRC website (shortly to be updated).